



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/538,244

06/06/2005

William John Owen

62737A

3578

25212 7590 12/17/2009  
DOW AGROSCIENCES LLC  
9330 ZIONSVILLE RD  
INDIANAPOLIS, IN 46268

EXAMINER

CHUI, MEI PING

ART UNIT

PAPER NUMBER

1616

MAIL DATE

DELIVERY MODE

12/17/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/538,244	<b>Applicant(s)</b> OWEN ET AL.	
	<b>Examiner</b> MEI-PING CHUI	<b>Art Unit</b> 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 August 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Status of Action***

Receipt of Amendments/Remarks filed on 08/05/2009 is acknowledged. Claims 1-8 are pending in the application.

Upon further consideration and search, the Examiner has new ground of rejection in this Office Action. Accordingly, this action is made NON-FINAL.

### ***Status of Claims***

Accordingly, claims **1-8** are presented for examination on the merits for patentability.

Rejection(s) not reiterated from the previous Office Action are hereby withdrawn. The following rejections are either reiterated or newly applied. They constitute the complete set of rejections presently being applied to the instant application.

### ***New Grounds of Claim Rejection***

#### ***Claim Rejection - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1616

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

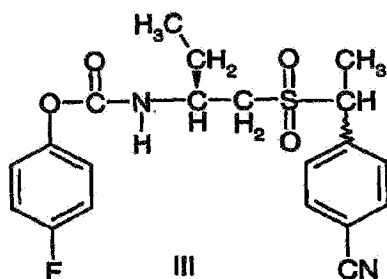
1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**(1) Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ricks et al. (WO 02/40431) in view of Gayer et al. (CA 2351500).**

*Applicants Claim*

Applicants claim a synergistic composition comprising the compound of formula III, which is represented as follows, and a second compound selected from the group of (a) to (e), wherein the mixture further comprises an additional pesticide compound.

Applicants also claim a process to control or prevent a fungal attack comprising applying to a locus a fungicide amount of a synergistic composition the compound of formula III:



***Determination of the scope and content of the prior art***

***(MPEP 2141.01)***

Ricks et al. teach a composition comprising a fungicidal compound having a chemical structure represented as recited (see page 31, compound No. 42), which has significant fungicidal effect and particular suitable for agricultural use.

Ricks et al. teach that the fungicidal compound can be used in a variety of ways: it can be applied in the form of a formulation comprising one or more of the compounds, i.e. as a pure enantiomer, a diastereomer, or a mixtures, with a phytologically acceptable carrier (page 5: lines 26-29; page 26-29; page 6: lines 1-3). Ricks et al. also teach that the fungicidal formulation can also contain other compatible additives, i.e. plant growth regulators or other biologically active compounds used in agriculture (page 6, lines 20-22).

More specifically, Ricks et al. teach a process to control or prevent a fungal attack by applying to a locus a composition comprises said fungicidal amount of the fungicidal compound set forth above. Ricks et al. also teach that the composition can comprise a disease inhibiting and phytologically acceptable amount of the fungicidal compound and at least one additional pesticidal compound selected from the group consisting of fungicides, insecticides, nematocides, miticides, arthropodicides, and bactericides (page 37: lines 8-21), wherein the amount of the fungicidal compound, i.e. compound No. 42, generally be from about 1 to about 1000 p.p.m., or preferably 10-500 p.p.m. (page 12, lines 10-11). In addition, the fungicidal compound is effective in controlling a variety of undesirable fungi that infect useful plants, i.e. Downy Mildew of Grape (PLASVI), Late

Art Unit: 1616

Blight of Tomato and Potato (PHYTIN), and Leaf Blotch of Wheat (SEPTTR) (page 11, lines 13-24).

***Ascertainment of the difference between the prior art and the claims  
(MPEP 2141.02)***

Ricks et al. do not exemplify the additional active that can be combined and applied with the fungicidal compound, as claimed. However, the deficiency is cured by Gayer et al.

Gayer et al. teach a novel combination comprising a pyrimidine derivative and at least one additional fungicidally active compound selected from the compounds no. 1 to no. 82, which is highly suitable for controlling phytopathogenic fungi (page 1, lines 4-7).

Gayer et al. teach that the additional fungicidal compound of no. 1 to no. 82 can be i.e. azoxystrobin (no. 16), mancozeb (no. 42), folpet (no. 43), cymoxanil (no. 45), fosetyl-Al (no. 46), chlorothalonil, metalaxyl, dimetomorph, famoxadone, iprovalicarb, captan, fenamidone, zoxamide (no. 72 taught by Gayer et al. and is the instant compound **a**), trifloxystrobin, picoxystrobin (see page 2-3; page 8-12; page 14, line 27; page 15, lines 8, 15-16, 18, 29).

Gayer et al. also suggest that besides the pyrimidine derivative of the formula (I) and at least one additional fungicidal active compound from compounds no. 1 to no. 82, the composition can further include other active additives, i.e. fungicides, where when they are present in certain weight ratios, the synergistic fungicidal effect is particular pronounced (page 7, lines 24-31; page 14, lines 12-15). In the treatment of plants, the active compound concentrations in the use forms can be varied within a relatively wide

range. In general they are between 0.0001 % to 1 % by weight, and preferably 0.001 % to 0.5 % by weight (page 17, lines 27-29).

In addition, Gayler et al. teach that the active compound combinations have very good fungicidal properties and can be employed in particular for controlling phytopathogenic fungi, i.e. *Oomycetes* (page 12, lines 2-5).

***Finding of prima facie obviousness Rational and Motivation***  
***(MPEP 2142-2143)***

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Ricks et al. with Gayler et al. to arrive at the instant invention.

One of ordinary skill would have been motivated to combine the fungicide compound, i.e. the compound no. 42 taught by Ricks et al., and the fungicides taught by Gayler et al. to produce a new fungicidal composition because both the prior art suggest that these fungicides are suitable to combine or use with other fungicides, such that their fungicidal efficacy can be broadened or synergism can be produced.

Therefore, the Examiner only conclude that it is ordinary innovation to combine a known fungicide compound with another known fungicide compound to produce a new fungicidal composition that performs the same fungicidal effect as when these fungicides are used alone.

From the teaching of the references, one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed external formulation. Therefore, the invention, as a whole, would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

***Conclusion***

No claims are allowed.

***Contact Information***

Any inquiry concerning this communication from the Examiner should direct to Helen Mei-Ping Chui whose telephone number is 571-272-9078. The examiner can normally be reached on Monday-Thursday (7:30 am – 5:00 pm). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where the application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either PRIVATE PAIR or PUBLIC PAIR. Status information for unpublished applications is available through PRIVATE PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the PRIVATE PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/H. C./

Examiner, Art Unit 1616

*/Mina Haghighatian/*  
Primary Examiner, Art Unit 1616



